# **EXECUTIVE SUMMARY**

The US-91 North Corridor Plan was prepared by the Idaho Transportation Department (ITD) to provide a comprehensive, long-range planning document that will guide corridor management and project programming over the next 20 years.

The corridor plan was prepared for the US-91 corridor from Siphon Road in the City of Chubbuck to Sunnyside Avenue in the City of Idaho Falls. The study area is shown in Figure ES-1. This 40-mile long corridor was divided into five segments to facilitate analysis and presentation:

Segment 1	Siphon Road to Sheepskin Road in Fort Hall (Milepost 81.580 to 88.876)	
Segment 2	Sheepskin Road to South Blackfoot Interchange (Milepost 88.876 to 97.052)	
Segment 3	South Blackfoot Interchange to Airport Road (Milepost 97.052 to 102.421)	
Segment 4	Airport Road to New Sweden Road (Milepost 102.421 to 118.8)	
Segment 5	gment 5 New Sweden Road to Sunnyside Road (Milepost 118.8 to 125.175)	

## **FS-1 PLANNING STFPS**

The corridor plan was developed in accordance with the ITD Corridor Planning Guidelines. It followed the following major tasks:

- Identification of Existing Transportation, Land Use and Environmental Conditions
- Identification of Future Transportation and Land Use Conditions
- Establishment of Corridor Need, Purpose and Goals and Objectives
- Development of Proposed Improvements and Management Strategies
- Identification of Recommended Management Strategies and Improvements
- Preparation of a Corridor Plan Document.

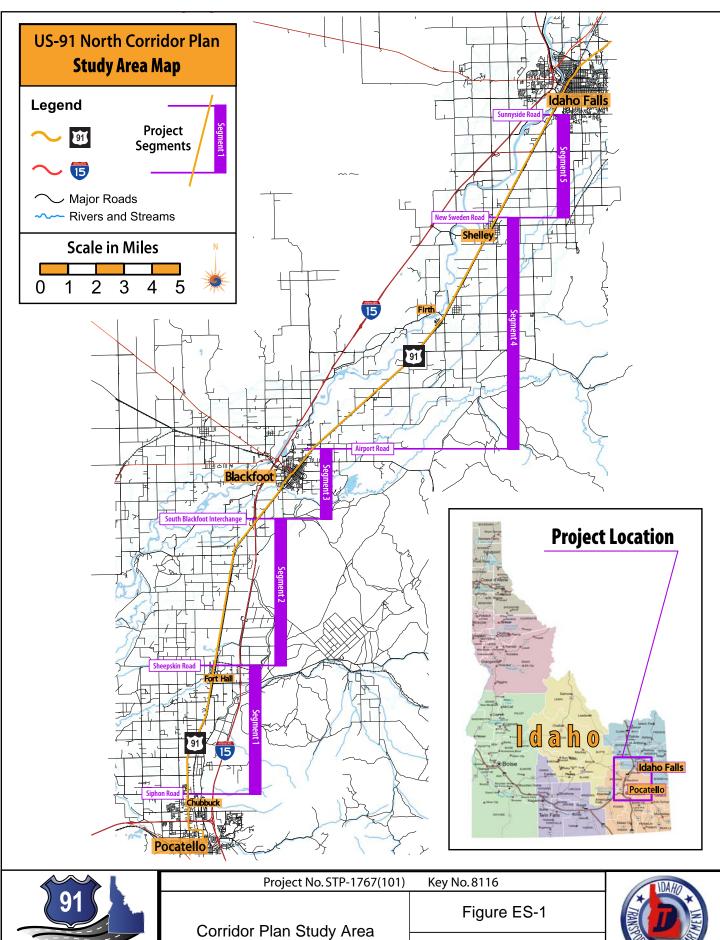
# **ES-2 PUBLIC INVOLVEMENT**

The US-91 North Corridor Plan was developed in consultation with a wide spectrum of public interests and roadway users. The purpose of this consultation was to identify project area issues and transportation needs, and to obtain input on alternative ways to address these issues and needs. The process included formation of a Technical Advisory Committee to share technical expertise and local knowledge, and a Task Force to facilitate involvement from elected officials, the Shoshone-Bannock Tribes and stakeholders.

A project website was established to facilitate distribution of information (<u>www.us-91.com</u>). Two newsletters were prepared, placed on the project website and made available to interested parties.

The process was organized and scheduled to correspond with important milestone decisions in the corridor planning process. The following activities were held to facilitate exchange of information and obtain input.

Purpose	Events
Issue Identification	Stakeholder interviews (28) Public open houses - Shelley High School, Blackfoot City Hall,
	Chubbuck City Hall, Fort Hall Business Center
	Technical Advisory Committee and Task Force meetings
Proposed	Bingham County Transportation Coalition presentation
Improvements	Public open house - Blackfoot City Hall
	Shelley to York Road landowner meeting
	Shoshone-Bannock Tribes consultation meeting





Date: August 2007



# **ES-3 CORRIDOR ISSUES**

The public involvement process described above identified a number of issues. Issues that occur throughout the US-91 corridor include the following:

Obstacles adjacent to travel lanes within the clear zone.	Proximity of railroad crossings to US-91
Skewed intersections with US-91	Perceived substandard vertical curves and sight distance
Agricultural and slow-moving vehicles	Perceived substandard horizontal curves and sight distance
Narrow canal and other bridge structures	Lack of shoulders
Lack of turn lanes on US-91	Lack of bicycle accommodations
Lack of turn lanes on cross roads	Lack of pedestrian sidewalks in urbanized areas

# **ES-4 CORRIDOR NEEDS**

The needs within the corridor were determined through analysis of existing transportation conditions and estimation of future transportation conditions, as well as from stakeholder input. These needs are summarized below:

Safety	Four High Accident Locations. Absence of shoulders, variable posted speeds, absence of turn lanes increases potential for crashes.
Roadway Deficiencies	Insufficient shoulder widths. Skewed cross street intersections. Sight distance issues. Narrow bridges that impede wide vehicles. Obstacles close to roadway within clear zone (i.e. bridge parapets, power poles).
Capacity	Peak hour Level of Service below ITD's stated policy Level of Service for nine intersections and some segments of US-91.
Classification/Function	US-91 an important local and regional link serving commuters, agribusiness, emergency services, school busing, and recreational travel.
Transportation Demand	Expected growth in housing and employment in Bannock, Bingham and Bonneville Counties. Expected development in the Fort Hall Reservation.
Modal Interrelationships	Accommodates school busing and local public and private transit providers.  Absence of bicycle facilities on US-91 and adequate pedestrian facilities.
Social Demands and Economic Development	Provides local and regional access for businesses, is a farm to market route, and a commuter route.

# **ES-5 CORRIDOR GOALS**

Goals for the US-91 corridor were defined to reflect the issues and needs identified through public involvement and technical analyses. These goals were used to guide the development and evaluation of proposed improvements and management strategies. Eight goals were identified:

GOAL I	Improve user safety.	
GOAL II	Enhance and maintain efficient movement of goods and people consistent with area-wide need and ITD standards.	
GOAL III	Contribute to and help sustain the economic vitality of the region through provision of mobility for all US-91 users.	
GOAL IV	Cooperate and coordinate with local governments, Union Pacific and the Shoshone-Bannock Tribes to maximize investments, improve safety, and optimize facility operation.	
GOAL V	Enhance regional circulation and connectivity.	
GOAL VI	Enhance sustainability of the US-91 Corridor.	
GOAL VII	Optimize opportunities for roadway improvements.	
GOAL VIII	Minimize the environmental and social impacts of highway improvements.	

# ES-6 OVERVIEW OF RECOMMENDED IMPROVEMENTS

The purpose of US-91 improvements is to:

- Improve safety,
- Address roadway deficiencies,
- Increase capacity, and
- Provide for multimodal usage

# ES-6.1 Corridor Level Improvements

A number of minor improvements are needed throughout the US-91 North Corridor to address safety, traffic operations and minor capacity issues. These include provision of turn lanes, installation of new traffic signals, shoulder improvements, realignment of skewed intersections, and replacement of bridge structures.

#### Turn Lanes

Right and left turn lanes are warranted at 41 intersections under existing conditions within the project area. Of these, full channelization is recommended at 4 locations. Turn lanes are incorporated into approved concepts for US-91 and Reservation Road, Agency Road, the Wooton Way to Airport Road projects, and the Shelley to York Road project. Several locations appear to have sufficient right-of-way to implement right turn lanes. Right-of-way may be required to provide left turn lanes and to fully channelize an intersection.

RECOMMENDATION: Implement intersection improvements as part of programmed projects, through inter-local agreements with cities, counties, and the Shoshone-Bannock Tribes, or in conjunction with maintenance projects conducted by District forces.

#### Shoulder Improvements

Many of the safety issues and minor intersection capacity issues throughout the US-91 corridor can be addressed through the provision of 6 to 8-foot shoulders, in accordance with Idaho Transportation Department and American Association of State Highway Officials (AASHTO) standards.

RECOMMENDATION: Implement wider shoulders throughout the US-91 corridor as part of existing programmed projects and road maintenance, and look for other opportunities to provide localized shoulder width improvements.

#### Skewed Intersection Improvements

Realignment of existing skewed intersections to improve sight distance will reduce the potential for crashes. Concept 1 shown in Figure ES-2 shows a general concept of the recommended improvement. Realignment is recommended at 18 locations, of which five will be implemented through concepts developed for Agency Road and Shelley to York Road projects.

RECOMMENDATION: Reduce the skew angle of intersections through reconstruction as part of other US-91 improvement projects and through adjacent land development.

#### Structures Improvements

Of the twelve bridge structures along the US-91 North Corridor, 8 are functionally obsolete because of narrow cross-section and substandard clear zones that impede use by wide vehicles and that also have reduced sight distance. All but one structure have acceptable structural sufficiency ratings and do not warrant replacement based on structural integrity alone. Structures that have vertical curves that impede sight distance could be replaced with a structure that has an increased cross-section and a lengthened vertical curve. This concept is shown in Concept 2 on Figure ES-2.

RECOMMENDATION: Replace existing narrow bridge structures and correct any vertical curve deficiencies to meet ITD and AASHTO standards as part of a structure replacement project.

#### **Traffic Signals**

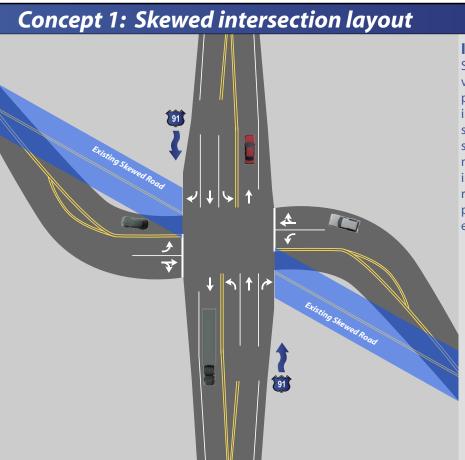
Traffic signals will be warranted by year 2025 at the intersections of US-91 and Agency Road, I-15 South Blackfoot Interchange northbound ramps, Walker Road, Highland-Rich, Airport Road and Center-Taylor Road.

RECOMMENDATION: Monitor traffic operations and crashes at these intersections and conduct signal warrants at 5 year increments. Incorporate signal infrastructure into any US-91 reconstruction project where signals will be warranted in the future.

# ES-6.2 Recommended Improvement Projects

This planning process has resulted in the identification of specific projects to address safety, capacity and traffic operations issues, in addition to the general corridor long improvements described above. Some of these projects are programmed in the State Transportation Improvement Program (STIP). These projects are summarized in the following table.

Location	Recommended Improvement
Reservation Road	Implement per STIP Project #8265.
Agency Road	Implement per STIP Project #9233.
US-91 and Shilling Avenue Intersection	Widen existing bridge to the east, incorporate shoulders and median, minor reconstruction of the intersection.
Walker Road Approach Lanes	Implement turn lanes on the east Walker Road approach to US-91.
Alice Street Improvements	Implement right turn lanes. Refine signal timing.
Wooton Way to Airport Road Improvements	Implement per STIP Project #7683.
Airport Road to Merkley Road Improvement	Develop this section as a single project and pursue jointly with City of Blackfoot and Bingham County.
Shelley to York Road	Widen US-91 in accordance with the Concept Plan when funding becomes available.

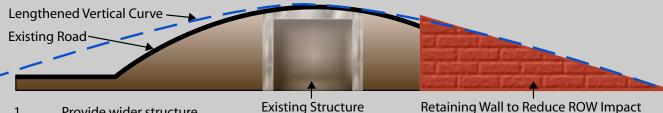


## **Improving Skewed Intersections**

Skewed intersections can create poor visibility for drivers and contribute to safety problems. Realigning a cross street to intersection US-91 at right angles is the best solution to this issue. A typical layout is shown on the right. This design concept may not be feasible at all skewed intersections, depending on available right-of-way, adjacent development and proximity to the Union Pacific rail line on the east side of US-91.

# **Concept 2: Vertical Curve Improvement Concepts**

#### Concept to Reduce Vertical Curve at Canal Structure and Improve Sight Distance



- Provide wider structure. 1.
- 2. Lengthen vertical curve.
- 3. Use retaining walls to minimize ROW impact.

Retaining Wall to Reduce ROW Impact



Project No. STP-1767(101)

Skewed Intersection and **Vertical Curve** 

Improvement Concepts

Figure ES-2

Date: August 2007

Key No. 8116



#### ES-6.3 Functional Classification Recommendations

The function and access control of US-91 to address its role in the transportation system was considered. US-91 functions in the region as a local roadway that serves agribusiness, commuters, school districts and commuters. It is also a reliever for I-15 when necessary. The future functional classification of US-91 may also need to take into account future growth and development within the area.

#### **RECOMMENDATIONS:**

Retain the Urban Principal Arterial designation from Siphon Road to Tyhee Road and within the City of Blackfoot.

Retain Major Collector status from Tyhee Road through the City of Shelley.

Upgrade to a Minor Arterial from New Sweden Road to York Road as part of the Shelley to York project.

Retain Urban Principal Arterial from York Road to Sunnyside in Idaho Falls.

Review functional classification of US-91 at 5-year intervals as part of a corridor plan update.

## **ES-7 IMPLEMENTATION PLAN**

The US-91 North Corridor recommended improvements will require implementation through the following mechanisms: STIP programming; local government projects; State and local government partnerships; State and Shoshone-Bannock Tribes partnership; and ITD maintenance program.

Environmental documentation prior to implementation of any of the recommended improvements will be required.

Cross-street realignments to improve skewed intersections will likely require new right-of-way and potentially have impacts that would trigger an environmental evaluation.